

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 7

**Complete if Known**

Application Number	10/620,174
Filing Date	July 15, 2003
First Named Inventor	William Howard Roark
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	PC25036A

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
ESO		US- 5,948,780	09/07/1999	Peterson, Jr., et al	
ESO		US- 6,008,243	12/28/1999	Bender, et al	
ESO		US- 6,037,361	03/14/2000	Roth, et al	
ESO		US- 6,156,798	12/05/2000	Reiter	
ESO		US- 2002/0019534	02/14/2002	Noe	
ESO		US- 2002/0151555	10/17/2002	Barvian, et al	
ESO		US- 2002/0151558	10/17/2002	Andrianjara, et al	
ESO		US- 2002/0156061	10/24/2002	Barvian, et al	
ESO		US- 2002/0156069	10/24/2002	Picard, et al	
ESO		US- 2002/0161000	10/31/2002	Barvian, et al	
ESO		US- 2002/0193377	12/19/2002	Andrianjara, et al	
ESO		US- 2003/0004172	01/02/2003	Harter, et al	
ESO		US- 2003/0078276	04/24/2003	Andrianjara, et al	
ESO		US- 2003/0130278	07/10/2003	Gaudilliere, et al	
ESO		US- 3,655,679	04/11/1972	Shen, et al.	
ESO		US- 5,521,181	05/28/1996	Meyer, et al.	
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
ESO		WO 02/064572 A1	08/22/2002	Andrianjara, et al		
ESO		WO 02/064595 A1	08/22/2002	Andrianjara, et al		
ESO		WO 02/096426 A1	12/05/2002	Sheppeck, et al		
ESO		WO 02/064568 A1	08/22/2002	Barvian, et al		
ESO		WO 02/064599 A1	08/22/2002	Dyer, et al		
ESO		WO 02/064547 A2	08/22/2002	Barvian, et al		

Examiner  
SignatureDate  
Considered

4/3/2006

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

Sheet	2	of	7
-------	---	----	---

**Complete if Known**


Application Number	10/620,174
Filing Date	July 15, 2003
First Named Inventor	William Howard Roark
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	PC25036A

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (# known)	MM-DD-YYYY			
ESO		WO 02/064598 A1	08/22/2002	Harter, et al		
ESO		WO 02/064080 A2	08/22/2002	Andrianjara, et al		
ESO		WO 02/064571 A1	08/22/2002	Barvian, et al		
ESO		WO 03/032999 A1	04/24/2003	Bunker, et al		
ESO		WO 03/033477 A1	04/24/2003	Gaudilliere, et al		
ESO		WO 99/52910	10/21/1999	Robinson		

Examiner Signature		Date Considered	4/3/2006
-----------------------	---	--------------------	----------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**



Under the Paperwork Reduction Project  
Substitute for form 1449/PTO

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.**

(Use as many sheets as necessary)

Sheet	3	of	7
-------	---	----	---

**Complete if Known**

Application Number	10/620,174
Filing Date	July 15, 2003
First Named Inventor	William Howard Roark
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	PC25036A

[illegible]

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
Eso		WO 02/064578	08/22/2002	Picard, et al		
Eso		WO 00/37107	06/29/2000	McKearn, et al		
Eso		WO 01/63244 A1	08/30/2001	Chen, et al		
Eso		WO 01/05389 A2	01/25/2001	Stallings, et al		
Eso		WO 00/09485	02/24/2000	McCLure, et al		
Eso		WO 01/12611	02/22/2001	Blagg		

**Examiner  
Signature**

Eril Rhen

Date Considered

4/2/2006

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/620,174
Filing Date	July 15, 2003
First Named Inventor	William Howard Roark
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	PC25036A

Sheet	5	of	7
-------	---	----	---

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

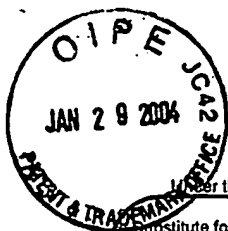
[illegible]

Examiner Signature	<i>[Signature]</i>	Date Considered	4/3/2006
-----------------------	--------------------	--------------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**



PTO/SB/088 (08-03)  
Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

### Complete if Known

Application Number	10/620,174
Filing Date	July 15, 2003
First Named Inventor	William Howard Roark
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	PC25036A

Sheet	6	of	7
-------	---	----	---

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
ESO		PCT International Search Report PCT/IB03/03103	
ESO		Weisburger, , et al, "Biochemical Formation and Pharmacological, Toxicological, and Pathological Properties of Hydroxylamines and Hydroxamic Acids", Pharmacological Reviews, 1973, Vol. 25, No. 1; pp 1-66	
ESO		Levin, et al, "The Discovery of Anthranilic Acid-Based MMP Inhibitors. Part 1: SAR of the 3-Position", Bioorganic & Medicinal Chemistry Letters, 11, 2001, pp 235-238; XP004314856	
ESO		Laufer, Stefan, "Was bietet die Zukunft? Neue NSAR", Selektivitätsfaktoren Von Cox-Inhibitoren; Vol. 31, No. 2, 2002; pp 164-169; XP001132092	
ESO		Goldman, et al, "Valdecoxib A Cox-2 Inhibitor for Treatment of Osteoarthritis, Rheumatoid Arthritis, and Primary Dysmenorrhea", Formulary, Advanstar Communications, Cleveland, OH, US; Vol. 37, No. 2, February 2002; pp 68, 71-74, 76-77; XP008009874	
ESO		Montana, et al, "The design of selective non-substrate-based matrix metalloproteinase inhibitors", Current Opinion in Drug Discovery & Development, 2000; 3(4); pp 353-361	
ESO		Clark, et al, "Matrix metalloproteinase inhibitors in the treatment of arthritis", Current Opinion in Anti-inflammatory & Immunomodulatory Investigational Drugs, 2000; 2(1); pp 16-25	
ESO		Chen, et al, "Structure-Based Design of Novel, Potent, and Selective Inhibitor for MMP-13 Utilizing NMR Spectroscopy and Computer-Aided Molecular Design", J. Am. Chem. Soc., 2000, 122; pp 9648-9654	
ESO		Lovejoy, et al, "Crystal structures of MMP-1 and -13 reveal the structural basis for selectivity of collagenase inhibitors", Nature Structural Biology, Vol. 6, No. 3, March, 1999; pp 217-221	
ESO		Moy, et al, "High-resolution Solution Structure of the Catalytic Fragment of Human Collagenase-3 (MMP-13) Complexed with a Hydroxamic Acid Inhibitor", J. Mol. Biol. (2000) 302; pp 671-689	

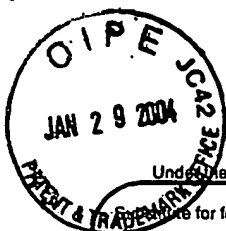
Examiner Signature	<i>Eric S. Olson</i>	Date Considered	4/3/2006
--------------------	----------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

## Complete if Known

Applicati n Num b r	10/620,174
Filing Dat	July 15, 2003
First Named Inventor	William Howard Roark
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	PC25036A

Sheet

7

of

7

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
ESO		Kujundzic, N. et al., "Synthesis of 8-Methyl-1,2,3,4-tetrahydropyrido-[3,4-d]pyrimidine-2,4-diones", Croatia Chemica Acta, 1991;64(4):599-606 (English)	
ESO		Hirota, K. et al., "Novel synthesis of pyrido[3,4-d]pyrimidines, pyrido[2,3-d]pyrimidines, and quinazolines via palladium-catalyzed oxidative coupling", Heterocycles, 1994;37(1):563-570	

Examiner Signature	<i>Eric S. Olson</i>	Date Considered	4/3/2006
--------------------	----------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.